

MANUFACTURING METHOD FOR AN ELECTROPHORETIC DISPLAY

ABSTRACT OF THE DISCLOSURE

a manufacturing method for an electrophoretic display
5 applying optical polymer material is provided. The main characteristic is that the charged pigment particles are confined with optical polymer material so as to achieve electrophoretic display. In the manufacturing process, a first layer of optical polymer material is coated on an
10 auxiliary substrate having a buffer layer for performing an optical polymerization manufacturing process. After the polymerization, on the first layer of the optical polymer material layer, the manufacturing process required by the electrophoretic display is further performed. After a
15 second layer of optical polymer material is coated on a substrate required by the electrophoretic display having a plurality of electrode patterns, by using a mask exposure, the optical polymer material is solidified to form a polymer wall, or a molding method is applied with ultraviolet
20 irradiation for solidifying the optical polymer material so as to form the polymer wall. Next, in a hole formed by the polymer wall, the mixture formed by the charged pigment particles and a few amount of optical polymer material is filled, and the auxiliary substrate is aligned with the

substrate so as to perform the mask exposure polymerization manufacturing process. Therefore, the auxiliary substrate is combined with the substrate. Finally, the auxiliary substrate is stripped out so as to finish the manufacturing

5 of a single substrate electrophoretic display.